

ABSTRACT

A motor of high precision in its rotation wherein the variation of the resonant frequency or the rotational run out due to thermal expansion of the component of the bearing device through the increasing temperature thereof is difficult to occur.

A motor having a rotating member 8 rotatably supported through a bearing device 5 on a base member 1 of the motor, said bearing device including a shaft 6, a cylindrical outer ring member 7 surrounding the shaft, and a plurality of balls 14a, 14b of the first and the second rows interposed between the shaft and the sleeve, the bearing device being characterized in that: the outer ring member includes upper and lower portions and a central portion therebetween, two rows of outer raceways 13a, 13b for the first and the second row of balls are formed on the inner peripheral surface of the upper and lower portions of the outer ring member, a squeeze member 16 of the same material as that used in forming the outer ring member or of any other material of substantially the same coefficient of linear thermal expansion as that of the outer ring member is press fit around the outer periphery of the central portion of the outer ring member to elastically deform the outer ring member inwardly to form an inwardly protruding squeezed portion 16.